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Class I, HEXAPODA.

Order II, COLEOPTERA.

NEW GENERA AND SPECIES OF COLEOPTERA.

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The following descriptions and notes are published in advance of a list of the Coleoptera known to occur in the lower Rio Grande Valley on which I have been at work; but have postponed its publication on account of the possible addition I may secure on my second trip to this interesting region. A few notes and descriptions of beetles from other regions are added.

Calosoma dietzii, new species.

Form of discolor, deep black, the reflexed elytral margin, base and sides of prothorax with a bluish reflection. Head sparsely punctate and very feebly rugose, epistomal impressions deep, causing a slight convexity of the front; labrum angularly emarginate, rugose and impressed; mandibles stout, faintly rugose; antennæ nearly as long as the head and thorax, the outer joints at sides glabrous at base. Prothorax not quite twice as wide as long, widest before the middle, sides arcuate anteriorly, becoming nearly straight posteriorly, hind angles broadly arcuate and produced posteriorly, base slightly arcuate-truncate, apex broadly emarginate, with a broad, flattened, impunctured bead; disk moderately convex, basal angles feebly impressed and slightly reflexed, surface very feebly rugose, finely and sparsely punctate, the punctures larger at sides, coarser and more confluent in the basal region, median line fine. Elytra oval, not quite one half longer than wide, very little wider than the thorax in its widest part, sides slightly arcuate, margin evenly and narrowly reflexed and coarsely rugosely punctate with a few granules intermixed; disk convex, striæ composed of fine, feebly impressed punctures, punctuation of intervals finer and sparser; surface smooth. Length, 15–18 mm.; width, 7–8.5 mm.

Tulare Co., California. Two males and two females in coll. Dietz which were mixed with typical *latipennis*.

This is the species referred to as *latipennis* by Major Casey in the remarks following the description of his *arcuata*.* The true *latipennis* has a narrower thorax, similar to *luxatum*, different form of elytra, the humeri serrate and the elytral margin more narrowly reflexed near base than at apex.

C. dietzii is best placed near *discors*, which it more resembles than *latipennis*.

Languria apicalis, new species.

Elongate, red, legs, except femora at base, and elytra metallic green, antennæ and the last abdominal segment black, elytra sinuate before the sutural angles. Head red, not coarsely punctured; antennæ black, basal joint reddish, club five jointed. Thorax longer than wide, sides slightly arcuate, hind angles acute, basal foveolæ short but distinct, punctuations finer at sides than on the disk, not coarse nor closely placed. Elytra punctate striate, intervals smooth, with a row of very fine scarcely visible punctures, obsolete in some specimens, slightly narrowing to apex, sinuate before the sutural angles. Body beneath and femore at base red, the rest of the legs metallic green, last abdominal segment black, which is more densely punctured than the rest of the underside. Length, 8–10 mm.

Brownsville, Texas.

Seven specimens, two in the collection of the Brooklyn Museum and five in the National Museum in Washington.

Type. — No. 8156, U. S. National Museum.

This is very distinct from any of the described species by the sinuate elytral apices. In one specimen, collected by C. H. T. Townsend the sinuation is very strongly marked. The thorax differs in shape as usual in this genus, in some specimens the sides are nearly parallel, while in others they are slightly arcuate and feebly sinuate before the hind angles. A specimen collected by Mr. Schwarz has the elytra blue and the thorax broader and more narrowed in front but does not differ otherwise.

SYNOPTIC TABLE OF LANGURIA.

Abdomen in great part red.
  Head red.
    Antennal club distinctly 6-jointed.
      Underside red, last abdominal segment black; thorax red, usually with a large black discoidal spot.. .....*bicolor* Fab.

* Annals N. Y. Acad. Sci., Vol. ix, p. 343.

Antennal club 5-jointed.

The last abdominal segment black, apex of elytra before the sutural angles sinuate..... *apicalis* n. sp.

Last 3 abdominal segments black, elytra at apex rounded, not sinuate.

Thorax shining, unicolorous red..... *mozardi* Lat.

Thorax alutaceous, having a greasy aspect, with a large elongate black discoidal blotch ..... *discoidea* Lec.

Head either entirely or in great part black.

Seventh antennal joint not very abruptly broader than the sixth and very much smaller than the ninth, tarsal joints more elongated, femora and tibiæ beneath asperate in the males, smooth in the females, thorax reddish, with a darker cloud at middle, sometimes absent, front of head above and beneath reddish..... *tædata* Lec.

Seventh antennal joint very abruptly broader than the sixth and much produced within, femora and tibiæ smooth beneath in both sexes.

Metasternum blue.

Last abdominal segment black, epipleuræ from base to nearly to apex red, head and last abdominal segment black, legs blue except femora at basal half and tibiæ at apex red, tarsi black, thorax red with a black spot at middle.....*marginipennis* Schwz.

Last 2 abdominal segments black.

Epipleuræ and sides of elytra only at middle red.

angustata Beauv.

Metasternum red.

Last 2 abdominal segments black.

Antennal joints black; elytra not fasciate; femora at apex, tibiæ at base and apex and tarsi black.....*uhlerii* Horn.

Antennal joints 3–6 red; elytra with broad median fascia red; femora, tibiæ and tarsi red.....*trifasciata* Say.

Abdomen entirely black.

Antennal club 6-jointed.

Head reddish, at sides and in front beneath black; thorax convex, apical and basal margins black.....*convexicollis* Horn.

Antennal club 5-jointed.

Head metallic black.

Greenish black, thorax reddish-yellow with a rather large green discoidal spot, elytral interstices with a few scattered punctures, underside of abdomen faintly punctate, metasternum uniformly, sparsely and clearly punctate, prosternum rather deeply punctate, antennæ rather elongate, club loose, last joint elongate.....*lecontei* Cr.

Brassy black, thorax red, interstices appearing obsoletely but thickly punctulate, underside nearly smooth.. .....*collaris* Lec.

Head red.

Seventh antennal joint at apex about one half the width of the ninth at apex, club not very much produced within, elytra blue.

californica Fall.

Seventh antennal joint at apex of nearly the same width as the ninth at apex, club very much produced within, elytra black.

Elytral intervals with very obsolete punctures and irregular elongate impressions..... *sanguinicollis* Chev.

Elytral intervals with a very fine series of small punctures, varying in strength..... *læta* Lec.

I have not been able to secure specimens of *lecontei* and *collaris* and the characters used for separation are taken from the descriptions. The two last species seem to be very close, *sanguinicollis*, which is said to occur in Texas, is not known to me and I have used the characters given by Mr. Gorham to differentiate the two species. *Languria tædata* Lec. is somewhat intermediate between the genera *Dasydactylus* and *Languria*, the anterior legs in the males are similar to those of *Dasydactylus*; the femora and tibiæ asperate beneath in the males is one of the characters used in defining that genus. The last mentioned character seems to have escaped the observation of Crotch and others.

Languria trifasciata Say is in my opinion entitled to specific rank; it has always the apices of elytra more pointed than *angustata*, the markings and the intermediate red antennal joints and the red metasternum seem to be also quite constant. Specimens of *angustata* are occasionally found with the red at sides of elytra extending nearly to suture, but the color is never clear red, the metasternum and the intermediate antennal joints always invariably black.

Acropteroxys gracilis Newman.

Specimens occurred at Brownsville with the typical form with the thorax entirely red or only a black basal spot approaching Dr. Horn's *divisa*.

Dasydactylus cnici, new species.

Elongate metallic green, underside reddish with metallic tint. Head sparsely punctured, antennæ concolorus except the last four joints which are black, club five-jointed. Thorax finely punctate, longer than wide, slightly arcuate at sides, feebly sinuate before basal angles, which are rectangular. Elytra gradually narrowing to apex, apices rounded and dentate; striæ not impressed, punctate, intervals smooth with a row of fine punctures. Underside reddish with metallic tint, very finely and sparsely punctate, last abdominal segment darker and a little closer punctured at sides. Femora, tibiæ and tarsi metallic green. Length, 6–10 mm.

S. Tomas and Esperanza Ranch, Brownsville, Tex. Types 6 specimens selected from a large series. Cotypes are in the Nat. Museum in Washington. *Dasydactylus* differs from *Languria* and allied genera in having the apices of elytra serrate, the males have the

front legs long, tarsi broadly dilated and the femora and tibiæ inside serrate.

This species is quite common and occurs especially on *Cnicus virginianus*.

I have used Mr. Schwarz' MSS. name under which specimens are distributed in collections.

Type. — No. 8157, U. S. National Museum.

Rhinomalus texanus, new species.

Piceous shining, beak reddish, elytra on each side one third from base with a flavate fascia not attaining the suture nor side margin. Head prolonged into a beak, between the eyes, longitudinally impressed, sparsely punctured; beak depressed, margined at sides and slightly carinate at middle, dilated at apex. Antennæ with the first joint as long as the next three, joints 2, 4 and 5 subequal, third a little longer than either the second or fourth, joints 6–11 broader forming a distinct club, eleventh longer than any of the preceding, which are equal among themselves. Thorax distinctly and somewhat sparsely punctured, as long as broad, arcuate in front, gradually narrowing to base, becoming abruptly narrower a little in advance of basal angles, on each side of disk a deeply impressed longitudinal line. Elytra, broader at base than the thorax, arcuate at sides, rotundate truncate at apex, striæ faintly impressed, intervals flat, very finely and sparsely punctate, a flavate fascia one third from base, not attaining side margin nor suture. Underside piceous sparcely punctate. Length, including the beak 2–4 mm.

Brownsville, Texas (La Tolusa and Esp. Ranch). Four specimens in the Museum of the Brooklyn Institute. *Rhinomalus* differs from *Læmophlœus*, to which it is nearly allied, by the head being prolonged into a beak, by the front coxæ more approximate and the prosternum slightly bent upwards behind the coxæ.

A number of specimens were taken in May at Tolusa at light and three specimens at Esperanza Ranch, July 1, by beating dead branches of *Acacia flexicaulis*.

Loberus ornatus, new species

Elongate, testaceous, more convex than *impressus*, disk of thorax, two large spots at base and a broad median fascia extending along the sides nearly to the humeri of elytra, blackish. Head sparsely punctured, denser in front of the eyes, which are convex and slightly prominent. Antennæ a little longer than the head and thorax, last three joints black. Thorax strongly transverse, apex truncate, front angles rounded, sides slightly arcuate, sparsely serrulate, basal angles rectangular, acute, base slightly lobed; disk convex rather coarsely sparsely punctured, finer at sides, basal transverse impression more acute than in *impressus*. Elytra more convex than *impressus*, arcuate at sides and slightly narrowing to apex, which is rounded, side margin below the humeri rather broadly explanate, disk with rows of not coarse nor very closely placed punctures, internals flat with a row of very widely placed smaller

punctures, the punctures of the striæ and internals each bearing a short, fine, recumbent pale hair. Body beneath concolorous, pro- and metasternum coarsely, sparsely punctate, abdomen sparsely punctured each puncture bearing a pale hair. Legs paler. Length, 2–2.25 mm.

Two specimens, Brownsville, Texas (S. Tomas and Fort Brown) in the Museum of the Brooklyn Institute of Arts and Sciences, cotypes in the Nat. Museum collected by C. H. T. Townsend and E. A. Schwarz. This can only be compared with *puberulus* Casey, from which it differs in coloration, more coarsely punctured thorax not subacute elytral apices and more convex elytra.

Tomarus chamæropis, new species.

Type. — No. 8158, U. S. National Museum.

Oval, black to piceous, apex of elytra paler, antennæ fulvous. Head sparsely finely punctured, antennæ slender, fulvous, fourth and fifth joint equal. Thorax much narrower than the elytra, slightly wider than long, front angles broadly rounded, sides nearly straight, hind angles rectangular, acute, base sinuate, basal foveæ deeply impressed. Elytra shining black, apex paler, about one third broader at base than the thorax, arcuate at sides and much narrowing to apex, surface rather coarsely but not densely punctured, punctures obliterated at apex, which is smooth and shining. Beneath piceous or paler, finely punctate, abdomen sparsely pubescent. Legs fulvous. Length, 1.5 mm.

Brownsville, Texas, three specimens in the U. S. Nat. Museum collected by E. A. Schwarz whose MSS. name I have used. Cotypes in the Museum of the Brooklyn Institute through the kindness of Mr. Schwarz.

Type. — No. 8159, U. S. National Museum.

By the nearly uniform color and narrow thorax this species is related to *niger* Sharp from Panama from which it is distingushed by the pale antennæ and legs, the fifth antennal joint equal to the fourth, the distinct basal foveæ of thorax and the more coarsely punctured elytra. The elytral punctures bear erect hairs, which seem to be on the thorax shorter and finer.

Teretriosoma chalybæum Horn.

With specimens, which agree with Dr. Horn's description and type, occurred one which has the front convex to the middle, at this point transversely sulcate, fringed with fine pale hairs, and below the transverse sulcation the surface deeply excavated, similar to *sexualis* described below and the Mexican *cavifrons*. While not able to absolutely prove it, yet I am convinced that it is the male of *chalybæum*,

with which I place it for the present, rather than create a possible synonym.

Teretriosoma sexualis, new species.

Subcylindrical, metallic green or blue, above somewhat coarsely not closely punctate, beneath more coarsely punctate, antennæ and legs reddish. Head between the eyes convex, at middle transversely sulcate and finely pubescent, below this sulcation very deeply excavated. Thorax withthe stria close to the margin, entire, the punctuation at apex a little finer and closer than near base. Baasl margin of elytra smooth, transversely impressed, faint on the disk, very deeply so and continued along sides to the middle of the humeral umbone, which is impunctate. Pygidium at middle acute, convex above, beneath concave. Prosternum truncate in front, longitudinally impressed on each side, not striate. Mesosternum semicircularly rounded in front, margined. Anterior tibiæ with eight, middle tibiæ with seven, hind tibiæ with five spines. Length, 2 mm.

Two specimens, Brownsville, Texas, in the Museum of the Brooklyn Institute.

I place with this species two specimens, which agree well with the type except that the front of head is convex and the pygidium more produced and which I regard for the present, according to th views expressed under *chalybæum*, as females. These supposed females are according to the description very close to *T. conigerum* Lewis described from an unique specimen from Guatemala but there is a difference in the number of spines of the tibiæ * the underside is not strigose-rugose and the abbreviated post-humeral stria, which is confluent with the basal impression, and when present in *conigerum* would have been mentioned in the description as to the presence or absence or number of striæ much importance is given in distinguishing species.

Teretrius levatus Horn.

I refer specimens which occurred frequently on dead branches of *Acacia farnesiana* at Brownsville, to Horn's *levatus*. They agree well with specimens collected in lower California by Mr. Beyer, except that in the Texas specimens there is a very small additional spine on the front tibiæ; size, form, sculpture are the same. It occurs also in S. Diego, Tex. and in Arizona where it was taken by Mr. Schwarz.

Camptodes texanus, new species.

Rounded, convex, testaceous, head, thorax and scutellum piceous shining, fading into rufous at sides of thorax and apex of clypeus, elytra greenish black. Labrum feebly lobed, the lobes rounded, not dentate. Thorax twice as broad as long, narrow-

*I have counted all the spines situated on the outer edge of the tibiæ.

ing to the front angles, base much broader than apex, basal angles broadly rounded, punctuation very fine and sparse on the disk, coarser at sides. Scutellum triangular black, shining with a few sparsely placed punctures. Elytra broader than long, greenish black, sutural striæ distant from the suture, but gradually approaching the suture towards apex, very close to the suture a row of very fine closely placed punctures, discal striæ represented by extremely fine, feebly impressed irregular lines, hardly visible at sides, interstices confusedly punctate; apex broadly rounded in both sexes, faintly sinuate before the sutural angles. Prosternum more coarsely punctate at middle, than prothorax, widened behind the coxæ, sparsely clothed with fine yellow hairs, metasternum a little more coarsely punctate than prosternum and abdomen, produced between the coxæ, marginal striæ obliterated in front; femora grooved for the reception of the flattened tibiæ, tarsi short, clothed thickly with yellow silken hairs. Length, 6 mm.; width, 4 mm

Brownsville, Texas, 2 specimens in the collection of the Museum of the Brooklyn Institute of Arts and Sciences.

A small number of this species were collected by Dietz, it was also taken by Prof. Wickham.

The genus *Camptodes* enters the tribe Cychramini of the family Nitidulidæ and will best be distinguished from the allied genera by the following table, which is the same as in the "Classification" with some slight alterations and the genus *Camptodes* added. *Psilopyga* is said to be distinct from *Oxycnemus* by Dr. Sharp.

Mesosternum protuberant in front, middle coxæ widely separated.
- Prosternum prolonged, broadly dilated at tip; body glabrous.
  - Labrum deeply bilobed; hind tarsi longer than the middle tarsi; prosternum at apex covering entirely the mesosternum ..... *Psilopyga* Lec.
  - Labrum feebly bilobed; middle and hind tarsi equal in length; prosternum at apex not covering entirely the mesosternum..... *Camptodes* Er.
- Prosternum less prolonged and feebly dilated at tip, not covering entirely the mesosternum, bodypubescent ..... *Amphicrossus* Er.

Mesosternum small, oblique not protuberant.
- Metasternum protuberant, widely separating the middle coxæ; prosternum not prolonged at tip, not laminiform, vertical behind the anterior coxæ; body glabrous..... *Cyllodes* Er.
- Metasternum not protuberant, middle coxæ narrowly separated.
  - Hind tarsi longer than the others; body glabrous..... *Pallodes* Er.
  - Tarsi equal in length, body pubescent ..... *Cychramus* Kug.

Throscinus schwarzii, new species.

Elongate oval, somewhat depressed, blackish green, underside and legs ferruginous to piceous, pubescence very short and fine. Head very finely punctate with larger sparsely placed punctures intermixed, deeply inserted in the thorax as far as the eyes, which are large but not very prominent; antennæ slender, first four joints pale, last seven joints black, slightly longer than the head and thorax; first two joints stout, but the second not quite as wide as the first, three and four narrower than the

first two, subequal among themselves, joints five to ten broader than the preceding two and shorter, gradually but slightly increasing in width, eleventh slightly longer than the penultimate. Prothorax wider at base than apex, sides arcuately narrowing to apex, base lobed at middle, the lobe before the scutellum very slightly emarginate, posterior angles very slightly prolonged behind, apex truncate, front angles prominent acute; disk convex in front, at sides near front angles depressed, extremely finely punctate, intermixed with sparsely placed larger punctures. Scutellum distinct narrower behind, very finely punctate. Elytra at base as wide as the thorax, sides nearly parallel, narrowing slightly towards apex, which is gradually rounded and acute at apex; disk feebly convex finely punctate with larger punctures intermixed. Underside finely and densely punctate, finely pubescent. Length, 2–2.25 mm.

Brownsville, Texas (Tolusa and Esperanza Ranch at light). Types, four specimens in the Museum of the Brooklyn Institute. Cotype, one specimen, Hubbard & Schwarz Coll., U. S. National Museum.

Type. — No. 8160, U. S. National Museum.

This fine species is dedicated to Mr. E. A. Schwarz as a slight recognition of the many favors received, while on a visit to Washington. Differs from *crotchii* in the much finer, shorter pubescence and more subopaque surface, the distinct seven-jointed club, pale legs, as well as being not as convex. From Casey's *politus* the greenish piceous, subalutaceous surface, the seven-jointed antennal club and the different punctuation of elytra will readily separate it. The following table based on the differences mentioned above will help in separating our three species.

Pubescence of upper surface consisting of very fine and short hairs, body above subopaque antennæ with first four joints pale, the seven-jointed club black...*schwarzii*.

Pubescence of upper surface consisting of coarser and longer hairs, antennæ black, club six-jointed, body above shining.

Third and fourth joint of antennæ subequal.....*crotchii*.

Third joint of antennæ longer than the fourth, almost as long as the fourth and fifth together.....*politus*.

Cinyra prosternalis, new species.

Elongate, cupreous, thorax with at most a faint longitudinal median impression. Head æneous, coarsely punctured, denser in the clypeal region; antennæ metallic green, not quite as long as the head and prothorax; clypeus broadly emarginate; front with an impunctured inverted W-like design. Thorax broader at base than apex, with sharp hind angles, a faint longitudinal median impression, and one broad shallow impression on each side of base; moderately coarsely punctate, sparsely at middle, more densely and in some parts confluently at sides. Elytra about three times as long as the thorax, apex quadrispinose, intervals sparsely and more finely punctate, alternate intervals more convex towards apex. Prosternum smooth and shining, in some specimens extremely finely punctate, at sides very coarsely and transversely con-

fluently punctate a little below the apex a short transverse impressed line; metasternum longitudinally impressed at middle, coarsely punctate at sides, finer and sparser at middle; abdomen coarsely punctate at sides, sparser at middle, first segment somewhat depressed at base with a faint longitudinal median impression, reaching to the middle of the segment; last ventral segment truncate, a small, more or less prominent apical tooth on each side. Legs metallic green or æneous. Length, 12–16 mm.

Four specimens in the Museum of the Brooklyn Institute taken at Esperanza Ranch, Brownsville, Texas. Of the same form as *gracilipes*, from which it differs by the larger size, smoother, hardly impressed prothorax, elytra very much more feebly sculptured, the more prominent elytral spines, the remarkable smooth shining nearly unpunctured prosternum at middle, very coarsely and closely punctured in *gracilipes*, and the broadly emarginate clypeus which is in *gracilipes* triangularly emarginate.

Chrysobothris purpureoplagiata, new species.

Elongate, feebly depressed, color bright green, elytra with more or less distinct purple blotches at apical third, like *lucana* Horn, surface subopaque, very feebly shining. Head densely punctured, an irregular arcuate smooth space at top of a bright metallic red color; clypeus semicircularly emarginate, antennæ cupreous, slightly more slender to tip, third joint a little longer than fourth. Thorax about one and a half times as wide as long, sides straight, slightly convergent to base, anterior angles rounded, disk moderately convex, surface regular without any inequalities, punctuation denser at sides than at middle, slightly strigose, at each apical angle a more or less distinct cupreous spot. Elytra a little wider than thorax, parallel, very slightly wider behind the middle, becoming narrower to apex at apical third where the margin is coarsely serrate, apices obtuse, disk at about basal third with a faint rounded fovea at middle, basal and infra-humeral foveæ distinct; surface somewhat coarsely and asperately punctured at base, gradually finer towards apex. Body beneath similar in color but more shining, sparsely punctate, ventral segments without callosities, margins of the last distinctly serrulate-prosternum lobed in front, coarsely and densely punctate; anterior femur with a small, acute tooth, and a few denticulations externally. Length, 6–7 mm.

Male.—Prosternum convex, coarsely and closely punctured, anterior tibiæ slightly arcuate, a short dilation near apex; middle and posterior tibiæ straight; last ventral segment, semicircularly emarginate; last dorsal slightly notched at middle.

Florence, Arizona, 3 specimens received from Mr. G. Franck as *C. prasina* Horn from which it is abundantly distinct.

The even thorax and the serrulate last ventral segment place this species in Dr. Horn's Group I, near *purpureovittata*, from which it is distinguished by the somewhat subopaque surface, the semcircularly emarginate clypeus and the slight median foveæ of elytra. The purple blotches are variable in size, they may extend to the base or

may be present only at apex; these blotches, if longitudinally confluent are never regular in outline as the vittæ in *purpureovitta*, being nearly the same as in *lucana*.

Chrysobothris beyeri, new species.

Form of *femorata*, but slightly more convex, cupreo-æneous, thorax more cupreous. Head transversely strigosely punctured, at top an arcuate carina, at middle between this and the clypeus two smooth callosities; antennæ cupreous, gradually more slender to tip, third joint a little shorter than the next two; clypeus broadly emarginate, arcuate each side. Thorax twice as broad as long, narrowed at apex and base, slightly arcuate at sides; disk feebly convex, median sulcus distinct, on each side near margin a shallow rounded impression, surface transversely strigose, not coarsely punctured. Elytra a little wider than the thorax, parallel to nearly apical third, then gradually narrowing to apex, apices obtuse, sides not strongly serrate; the subsutural costa more elevated from a little before middle to apex, the second costa elevated from base to apex but interrupted at basal third, the third costa more feeble and interrupted at a little behind middle by a fovea, which is more finely sculptured than the rest of surface, the fourth costa near margin entire; surface sculpture rugose, punctuation somewhat sparse, basal and humeral impressions feeble. Body beneath coarsely punctured, each ventral segment at side with a distinct callosity; prosternum in front very feebly arcuate; anterior femora with a broad tooth, serrulate on its margin, last ventral with serrulate margin. Length, 11–12 mm.

Male. — Prosternum moderately densely punctate, and finely pubescent; anterior tibiæ arcuate, broadly dilated at tip, middle tibiæ straight, slightly bent at apex, hind tibiæ straight; last ventral segment, broadly emarginate, last dorsal truncate.

Female. — Prosternum as in the male, anterior tibiæ slightly arcuate, middle and hind tibiæ straight; last ventral segment not as broadly emarginate as in the male, more semicircular.

San Felipe, Lower California; four specimens in the Museum of the Brooklyn Institute from Mr. G. Beyer in whose honor I have named this species as a slight recognition of the many favors received. *C. beyeri* resembles *texana* in color and sculpture but very distinct from it by the different emargination of the clypeus and last ventral segment and the much more feeble prosternal lobe, the anterior tibiæ of the male in this species are not sinuate before the dilatation as is the case in *texana*. As I am informed by Mr. Beyer this species is very abundant on willow in the dry season in May and June.

Chrysobothris peninsularis, new species.

Form of *floricola*, color dark bronze; antennæ short, metallic green, slightly narrowing to apex, third joint as long as the next two; clypeus very broad, but shallow emarginate at middle. Thorax twice as wide as long, sides nearly parallel, very slightly narrower at base, more rounded and narrowed at apex than at base, disk feebly convex, a vague median impression and very obsolete, rounded impression at sides; punctuation sparser at middle, coarse and confluent at sides. Elytra very little

wider than the thorax, parallel, gradually narrowing to apex from a little behind the middle, margin serrulate, apices obtuse; disk feebly convex, the first costa elevated, obsolete in basal third, second costa interrupted by a rounded impression, which is more densely punctured than the rest of elytra, third costa interrupted by a fovea a little behind the middle, between the first and second costa, at about apical fourth is a smooth, densely and more finely punctured spot; basal foveæ deeply impressed; surface on the disk sparsely punctured, very densely at sides. Underside bright cupreous, abdomen moderately densely punctate, with elongate punctures, each segment on each side with a smooth callosity, last segment serrulate, truncate emarginate at apex, with the angles acutely prolonged. Last dorsal sparsely to coarsely punctured, blue, bronze around the triangular emargination. Anterior femora with a moderate tooth, serrulate on its distal margin; anterior tibiæ arcuate, slightly dilated at apex with a sharp tooth in front of dilatation, middle tibiæ arcuate, hind tibiæ slightly sinuate. Length 11.25 mm.

San Felipe, Lower California, one male from Mr. G. Beyer in the Museum of the Brooklyn Institute.

Chrysobothris subapaca, new species.

Elongate, slightly depressed, color green, each elytron with an elongate irregular purple spot at apical third, surface subopaque, beneath green shining. Antennæ æneo-cupreous, third joint a little longer than fourth, front slightly convex, with a faint chevron; clypeus triangularly emarginate; thorax twice as wide as long, arcuate at sides, disk convex, a moderately deeply impressed line at middle, a vague median impression at sides near margin, somewhat coarsely punctured, more densely at sides. Elytra a little wider than the thorax, parallel, narrowing to apex at apical third, margin feebly serrulate, apices obtuse; disk very slightly depressed, costæ obliterated in front, faintly indicated behind, basal foveæ faintly indicated, between the first and second costæ at middle a faint longitudinal impression, surface uneven, finely rugose, punctuation finer than that of thorax, becoming obsolete towards apex. Body beneath transversely confluently punctured, last segment with feeble serrulate margin, prosternum lobed in front; anterior femur with a moderately large tooth, serrulate externally.

Tulare Co., California, one male in collection Dietz.

Male. — Prosternum distinctly depressed at middle, densely punctate, sparsely pubescent, anterior tibiæ nearly straight, with a very feeble dilatation at tip; middle tibiæ nearly straight, dilated at tip, posterior tibiæ straight; last ventral segment semicircularly emarginate; last dorsal truncate at tip, somewhat coarsely punctate. Length, 7 mm.

Although a little more depressed than *cyanella* Horn it is best placed near that species from which it differs by the opaque surface, the entirely different surface sculpture and the two irregular elongate purple spots at apex of elytra, which are perhaps as variable as in *lucana* and *purpureoplagiata*.

Actenodes flexicaulis, new species.

Elongate, dull bronze to nearly black, underside metallic green or blue, cupreous at sides. Antennæ metallic green to purple. Clypeus truncate, with a very feeble tooth at middle, front very coarsely asperately punctured with the usual chevron-like design. Thorax twice as wide as long, narrower at apex than at base, sides straight, subbasal transverse impression strong; punctuation denser at apex, punctures larger and more sparsely placed at sides and base. Elytra a little wider than the thorax, parallel nearly to the middle, slightly widening behind the middle and then arcuately narrowing to apex, which is obtuse, side margins serrulate; surface scabrous, costæ distinct at about apical half, stronger at apex; base transversely impressed, the impression metallic green, a strongly angulate irregular fascia at about basal third, an oblique fascia slightly behind middle and a large spot between suture and first costa metallic green and cupreous, the spot and the lower costa sometimes united by a narrow cupreous lines, sides at apical third narrowly margined with metallic green. Body beneath shining, abdomen sparsely punctate, the punctures not deeply impressed. Length 7.50–10.25 mm.

Esperanza Ranch and S. Tomas, Brownsville, Tex. Four specimens in the Museum of the Brooklyn Institute.

I have taken a small number of this fine species from branches of *Acacia flexicaulis*, in which it undoubtedly breeds; no specimens were taken on any other tree.

The North American species of *Actenodes* now known may be separated by the following table.

Eyes on the occiput separated by about their own width.

Robust unicolorous, elytra without costæ, front convex not longitudinally impressed. *menæax*, Horn.

Eyes on the occiput narrowly separated by about half or less of their own width.

Elytra not distinctly costate, or at most the costæ indicated by smooth more or less distinct lines, hind angles divergent, faintly in some specimens of *acornis*.

Elytra unicolorous, without golden or metallic spots or fasciæ, front convex not longitudinally impressed.....*acornis*, Say.

Elytra with suture, margin near apex, humeri and four spots on each side metallic green or cupreous, front longitudinally impressed. *auronotata*, Lap. & Gory.

Elytra with one strongly angulated, very indistinct, metallic green and cupreous fascia before the middle and one behind, ending in a slight fovea near side, basal depressions and suture at base metallic green; front longitudinally impressed, costæ faintly indicated.....*calcarata*, Chev.

Elytra distinctly costate in apical half, the costæ distinctly raised and more prominent towards apex, hind angles, or more properly the sides of thorax near base convergent, elytra with a strongly angulated metallic green and cupreous fascia before middle and an oblique one continued down the first costa for a short distance and approaching the suture, front faintly impressed..*flexicaulis*, n. sp.

Acmæodera rubescens, new species.

Nearly of the form of *gemina*, piceous, thorax and head very faintly bronzed, body beneath with scale-like white hairs, sparsely placed, the elytral markings are an exact reproduction of those of *opinabilis* but in addition the apex is bordered with red. Antennæ with the fifth joint much wider than the fourth. Front convex, coarsely and closely punctate. Thorax twice as wide as long, widest behind the middle, arcuate at sides, narrowing to apex, slightly sinuate behind the middle, hind angles rounded, lateral margin not visible from above, disk slightly depressed, a faint fovea at middle and one on each side near hind angles, surface very coarsely, cribrately punctured, opaque very slightly bronzed, a small yellow spot on each side near the hind angles. Elytra narrower at base than the thorax at middle, sides slightly narrowing to the middle then arcuately narrowing to apex, margin serrate, striæ with coarse deep closely placed punctures, intervals narrower than the striæ, maculation yellow exactly like *opinabilis* with the apex bordered with red. Prosternum very coarsely punctate, anterior margin slightly sinuate, nearly attaining the anterior angles. Metasternum and abdomen coarsely punctate each puncture bearing a scale-like white hair. Last ventral segment with double margin caused by a few confluent punctures. Length, 6 mm.

Santa Rosa, Lower California. One specimen in the Museum of the Brooklyn Institute from Mr. G. Beyer.

This species has to be placed near *gemina* and *insignis*.

Mastogenius reticulaticollis, new species.

Elongate oval, black, elytra dark blue, thoracic sculpture reticulate. Head convex, with a slight median impression, moderately coarsely punctured. Thorax nearly twice wider than long, sides slightly arcuate, nearly parallel behind, base truncate, carina at sides obliterated at apex, gradually narrowing towards the side margin at base, surface distinctly reticulate, base slightly transversely impressed with a row of punctures. Elytra as broad as the thorax at base, sides gradually narrowing to apex, base acutely and strongly impressed, surface shining, dark blue, finely punctured, a little coarser at sides, punctures somewhat elongate. Beneath black, prosternum, metasternum and last ventral segment coarsely punctured, the rest of abdomen more sparsely and finely. Length, 2.5–3.5 mm.

Five specimens, Brownsville, Texas, two in the collection of the Museum of the Brooklyn Institute, two in coll. Dietz, all four collected by the late Ottomar Dietz, and one in the Nat. Museum in Washington collected by C. H. T. Townsend, this latter one is the largest. Distinguished from *subcyaneus* by the form and sculpture of prothorax, the feeble frontal impression and the entire black legs and antennæ.

Type.—No. 8161, U. S. National Museum.

Agrilus dollii, new species.

Form, size, color and markings of *lecontei*, but a little more robust, each elytron at apex emarginate. Antennæ reaching to about the middle of the thorax, piceous with æneous lustre, serrate from the fifth joint; head slightly convex, rather broadly

longitudinally impressed; surface coarsely punctate, strigose. Thorax a little wider than long, sides feebly arcuate, in some specimens nearly straight, side margin sinuate, hind angles rectangular, carinate; disk moderately convex, with a deep median impression, composed of two broad foveæ united by a groove, lateral oblique depression moderately deep, surface coarsely punctate, transversely strigose. Scutellum transversely carinate. Elytra feebly sinuate behind the humeri, broadened behind the middle, narrowing to apex, each tip emarginate and serrulate; disk slightly depressed with a faint indication of a costa on each side, surface subgranulate with pubescent spaces exactly as in *lecontei;* body beneath sparsely pubescent; prosternal lobe broadly emarginate, intercoxal process narrower between the coxæ, dilated behind and truncate apex. Abdomen sparsely punctate, vertical portion of the first two segments not much denser than at middle; pygidium feebly carinate, carina not extending to apex, claws cleft at middle forming a broad tooth. Length, 4–5.5 mm.

Brownsville, Texas (Esperanza Ranch and Tolusa, May, June and July). Four specimens in the Museum of the Brooklyn Institute.

Dedicated to my friend and companion Mr. Jacob Doll in remembrance of the interesting trip made together to the lower Rio Grande region.

This species has to be placed near *impexus* in Dr. Horn's table, from which it differs in the emarginate prosternal lobe, different markings, the emarginate elytral apices and smaller size. From *lecontei* which it very closely resembles it differs in having the front impressed and the elytral apices emarginate.

Rhæboscelis texana, new species.

Elongate, slightly shorter and more robust than *tenuis*, thorax and elytra brown with slight metallic lustre. Head finely punctured with coarser not very closely placed punctures intermixed, front deeply impressed; antennæ serrate from the sixth joint. Thorax as long as broad, sides strongly deflexed in front, less strongly near base, side margin not visible from above, apex feebly arcuate, base strongly bisinuate, median lobe truncate, disk impressed at middle, sides and base, the two on the basal lobe foveæ-like, the two outer ones more elongate, the latter a short distance from basal angles, surface transversely, arcuately strigose. Elytra about two and one half times as long as the thorax, sides slightly narrowing to middle, then arcuate and narrowing to the apex, apices truncate, basal impressions large, a slight depression before the humeral costa, sides declinous to about the middle, surface rugosely sculptured. Antennal groove deep, abdomen shining, with very fine-punctured, densely placed and some larger ones more sparsely placed. Pygidium carinate at middle, with a sharply limited oblique channel on each side, continued along the carina not quite to apex. Length, 3 5–4 mm.

Brownsville, Texas (Esperanza Ranch). Four specimens in the Museum of the Brooklyn Institute. As compared with *tenuis* this species is shorter, more robust, thorax more convex, with the side

margin not visible from above, and the surface not impressed across the middle.

Paraptorthodius, new genus.

Head deflexed; eyes lateral, convex, prominent; mandibles slightly arcuate, acute, not dentate. Last joint of maxillary palpi slightly widening to apex, obliquely truncate, last joint of labial palpi oval. Antennæ twelve jointed, second and third joint each shorter than first, joints four to eleven, each with two oval, leaf like appendages at base, twelfth with one similar appendage, but closely soldered to the entire length of the joint, each of these joints except the last have in addition a short tooth-like process on the underside at middle, of the same texture as the leaf-like appendages. Side margin of thorax slightly thickened, prothoracic epipleuræ parallel, distinct. Prothorax beneath broadly deeply emarginate in front.

Type.—Paraptorthodius mirabilis.

The twelve-jointed antennæ brings this genus near the Central-American *Ptorthodius*, from which it differs by the deflexed head, mandibles slightly arcuate and the structure of the antennæ. The head in the single specimen is exserted but the excavation of the thorax beneath is undoubtedly intended for the reception of the head.

Mr. Gorham has transferred *Ptorthodius*, *Euryopa*, and our *Mestinocerini*, to which the first two genera are allied, to the Lymexylidæ. While he may be correct in this, yet I think it is not advisable without a thorough critical study of both families to make such a change. *Tytthonyx* included by Leconte in this tribe is not mentioned, it is a disturbing element there and may have to be removed.

Paraptorthodius mirabilis, new species.

Yellowish, elytra abbreviated, antennæ short, twelve jointed, joints two and three short, four to eleven on each side of base with a leaf-like appendage, twelfth compressed, leaf-like, and each joint, except the last, in addition on the underside at middle, a tooth-like process of the same texture as the appendages. Head without the eyes quadrate, coarsely and densely punctured, impressed between the antennæ; eyes large, rounded, prominent; antennæ twelve jointed, first joint stout, as long as the next two, second nearly as stout as the first one, but shorter, broader at apex than at base, third shorter and narrower, four to ten subequal among themselves, eleventh a little longer than the tenth, twelfth as long as the tenth, joints four to eleven with a leaf-like appendage on each side of base, twelfth compressed, leaf-like and each of these joints except the twelfth has in addition on the underside at middle a tooth-like process. Thorax as long as broad, apex slightly arcuate and feebly widening to about basal fourth, then suddenly obliquely narrowing to base which is hardly wider than the scutellum, disk with a broad impression near base, surface not quite as densely punctured as the thorax. Scutellum nearly as wide as the thorax at base, truncate at apex and coarsely punctate. Elytra shorter than half of the length of the breast and abdomen, at apex rounded and slightly narrower than at base, somewhat

rugosely punctured, coarser at base than at apex; wings grayish, veins darker. Under surface more finely punctured than the upper surface. Last joint of maxillary palpi slightly widening to apex and obliquely truncate, last joint of labial palpi oval. Prothorax beneath broadly and deeply emarginate in front just before the front coxæ. Hind tibæ outside longitudinally impressed at apical half. Abdomen broad, gradually narrowing to the sixth ventral, last segment conical. Length, 7 mm.

One specimen in the Hubbard and Schwarz coll. U. S. National Museum, taken by Mr. Schwarz, June 6, in San Diego, Texas.

Type.—No. 8162, U. S. National Museum.

This insect is very remarkable by the structure of the antennæ. I have called the twelfth joint compressed leaf-like, which appearance it has, but it is more correct as given in the generic description, that to the entire length of the twelfth joint an appendage is soldered similar in shape and texture to the others, given this joint the appearance of a leaf like appendage of the eleventh joint.

The apendages and tooth-like projections are much paler in color than the joints. There may be some doubt as to the correctness of my observation in regard of the twelfth antennal joint, but I have carefully examined the antennæ from every point and the specimen was excellently mounted by Mr. Schwarz, and in good condition. On looking from above the division between the eleventh and twelfth joint could be as plainly seen as that between the tenth and eleventh.

Cenophengus ? pallidus, new species.

Elongate, opaque, pale yellowish; thorax distinctly longer than wide, side margin deflexed more widely at apex. Head flat, parallel, coarsely punctured, moderately, densely pubescent with pale hairs; eyes large, convex, rounded; antennæ eleven jointed, biramose from the fourth joint. Thorax distinctly longer than wide, narrower at apex, sides slightly arcuate, side margin broadly deflexed near apex, narrow at base, basal angles variable, base slightly lobed at middle, disk alutaceous, with coarse punctures, sparsely placed and not deeply impressed. Elytra short, not quite half as long as the body, narrowing to apex, which is subacutely rounded, disk finely granulate, punctate smoother near base. Maxillary palpi long, last joint triangular or rather securiform, labial palpi short with last joint oval. Last ventrat segment narrowly, rather deeply, emarginate. Length, 3 mm.

Brownsville, Texas (Esperanza Ranch, June). Four specimens in the Museum of the Brooklyn Institute.

This species is not a *Cenophengus* according to our present classification, there is no acute side margin of the thorax and the last joint of maxillary palpi is not cylindrical. Dr. Leconte's generic description is very short and in absence of specimens for comparison I prefer to leave it in this genus for the present.

The following table of the genera of the Mastinocerini, the two Mexican ones included, is based on the characters given in the descriptions of the genera.

Antennæ twelve-jointed.

Joints four to eleven of antennæ each with two short leaf-like appendages at base, between these at middle a smaller dentiform process; soldered to the entire length of the twelfth joint is an appendage, similar in shape and texture to the larger ones; mandibles slightly arcuate, acute, not toothed; last joint of maxillary palpi gradually widening to apex, which is obliquely truncate, last joint of labial palpi oval.....*Paraptorthodius*, n. g.

Joints four to eleven biramose, twelfth simple; mandibles strongly falcate; last joint of maxillary palpi gradually widening to apex, which is obliquely truncate, last joint of labial palpi oval.....*Ptorthodius*, Gorh.

Antennæ eleven-jointed.

Antennal joints three to ten biramose, last joint of maxillary palpi subequal to the preceding, ovate; eyes beneath nearly contiguous.....*Euryopa*, Gorh.

Antennal joints four to ten biramose.

Prothorax as long as wide, flanks acutely margined, maxillary palpi with last joint securiform.....*Mastinocerus*, (Sol.) Lec.

Prothorax as long as wide, flanks acutely margined only behind the middle, obliterated in front; maxillary palpi with the last joint long and cylindrical.....*Cenophengus*, Lec.

Tytthonyx ruficollis, new species.

Red, antennæ, palpi, elytra, wings, tibiæ in great part, and tarsi black. Head red, broader than long, deflexed, finely, densely punctate, eyes small, rounded, convex, finely granulated. Antennæ nearly as long as the entire body, black, first joint more or less red, compressed, serrate, joints triangular, second shorter and narrower than the third, outer joints narrower than the intermediate joints. Prothorax red, transverse, truncate in front, broadly rounded behind, surface closely and finely punctate, a fine median impressed line more or less distinct, and a few vague shallow impressions, as in *erythrocephalus*, variable in distinctness. Elytra black, one half as long as the abdomen, rounded at tip, slightly costate, faintly rugosely punctured. Abdomen red, legs black except femora at base. Length, 3.5–4 mm.

Brownsville, Texas (S. Tomas, Esperanza Ranch).

Types.—Four specimens.

In *erythrocephalus* the antennal joints differ in the two sexes. There is a little difference in the antennæ in the specimens before me but the last two abdominal segments are truncate at apex in all the specimens.

Cymatodera peninsularis, new species.

Nearly of the form of *texana*, pale, head, apex of thorax, base, suture and a lateral line, widened behind the middle black. Head black, mouth parts pale, somewhat sparsely punctured in front, more closely on the occiput; antennæ stout, pale,

reaching nearly to the middle of elytra, second joint smaller than the third, which is about one third longer than the second, joints five to ten of equal width, but gradually decreasing in length, last joint oval, one third longer than tenth. Thorax as long as broad, very finely and sparsely punctured, more densely in front, pale testaceous, black in front of apical constriction, sides strongly narrowed behind, base narrower than apex, a slight antescutellar impression. Elytra wider than the thorax, humeri prominent, sides parallel, apices separately rounded, surface with striæ of closely placed not very large punctures, intervals with very sparsely placed fine punctures bearing erect hairs, pale testaceous, a fascia across the base, suture nearly to apex and at sides a narrow line, arcuately widened behind the middle, black; side margin to the middle pale. Body beneath and legs pale. Length, 6 mm.

San Felipe, Lower California. Two specimens from Mr. G. Beyer in the Museum of the Brooklyn Institute. The fifth abdominal segment is triangularly emarginate, the last dorsal nearly truncate, extremely feebly sinuate at middle, broader and larger than the sixth ventral, they are probably males. The second joint smaller than either of the two following places this species near *xanti* of Dr. Horn's table, from which and from all our other species the elytral markings separate it. In some specimens in Mr. Beyer's collection the black markings are more or less confluent and the elytra may be then more properly described as black with two pale spots, one large elongate, one starting below the humeri and a smaller one at apex.

Cymatodera obliquefasciata, new species.

Form of *inornata* but more robust, brown, with an oblique yellowish fascia at middle, reaching to the seventh striæ, the sixth interval from the humeri to the fascia yellowish, in some specimens only faintly indicated near the humeri and the fasciæ. Antennæ a little longer than head and thorax, serrate from the fourth joints, first joint stout, as long as the next two, second joint small half as long as the third, joints four to ten broader, serrate, subequal, eleventh elongate, narrower, as long as the two proceding joints. Head coarsely somewhat cribrately punctured. Thorax longer than broad, convex, sparsely hairy, sides nearly straight with a very feeble tubercle at middle, surface somewhat vermiculate, no antescutellar impression. Elytra broader than the thorax, humeri prominent, widening to apical third, then arcuately narrowing to apex, which are separately rounded; disk moderately convex, with ten rows of coarse closely placed punctures becoming gradually finer towards apex and entirely obliterated in the apical region, intervals slightly broader than the striæ, flat, finely punctate. Pro-, meso- and meta-sternum brown, the latter at sides and abdomen testaceous, abdomen finely punctate, femora and tibiæ brown, tarsi testaceous. Length, 10–11 mm.

Brownsville, Texas (Esperanza Ranch), from *Acacia flexicaulis*.

Three specimens in the Museum of the Brooklyn Institute. The fifth ventral is very slightly sinuate at middle, the sixth narrower, rounded, last dorsal semicircular. The specimens seem to be females.

To be placed by the structure of the antennæ near *xanti*, of Dr. Horn's table from which it differs by the longer third joint, the more coarsely sculptured thorax, the intervals confusedly punctate and the oblique fascia.

Cymatodera latefascia, new species.

Moderately robust, color testaceous, head, thorax and base of elytra darker, a broad fascia from the middle to not quite the apex black. Head somewhat coarsely, in some parts confluently punctured, eyes moderately prominent. Antennæ as long as half the body, joint two small, three a little longer than the second, fourth joint as long as the second and third together, four to ten nearly equal, elongate, eleventh very little longer than the tenth. Thorax longer than wide, base narrower than apex, feebly constricted in front of middle, strongly compressed at sides behind, disk moderately, coasely, confluently punctate. Elytra nearly twice as wide as the thorax at base, humeri distinct, sides parallel, apex rounded, disk feebly convex, with striæ of large close punctures, becoming gradually smaller and obliterated at extreme apex, intervals as wide as the striæ, slightly convex, with a single row of fine, sparse punctures, from each puncture arises a single hair. Body beneath and legs testaceous, metasternum sparsely punctured, more coarsely and densely at sides, abdomen finely punctate. Length, 8–8.5 mm.

Fort Grant, Arizona; New Mexico.

Three specimens; a female in the Museum Collection from the first named locality, kindly given by Mr. Schwarz, another female from New Mexico and a male from Arizona without definite locality in the Dietz Collection. The male has the hind margin of the fifth ventral segment truncate, sixth feebly, broadly emarginate, last dorsal broadly emarginate, angles rounded, longer and broader than the sixth ventral. The hind margin of the fifth ventral in the female is truncate, the sixth rounded at apex.

Type. — No. 8163, U. S. National Museum.

Cymatodera fuchsii, new species.

Brown, slender, rather densely pubescent with moderately long hairs and longer, sparse, erect hairs intermixed; elytra perforate punctate, with a pale median fascia not quite distinct and irregular in outline. Head rather coarsely punctate, densely pubescent with moderately long and longer erect hairs intermixed; eyes moderately prominent; antennæ nearly reaching to the middle of elytra, joints slender, first joint as long as the next two, two to ten subequal, eleventh longer than tenth pointed at tip. Thorax nearly twice as long as wide, slightly constricted in front and feebly compressed behind, without antescutellar impression, disk coarsely and densely punctate, densely pubescent with moderately long decumbent hairs and sparser longer intermixed. Elytra nearly twice as wide as the thorax at base, humeri distinct, sides parallel to apical fourth, then narrowing to apex, apices separately rounded, disk with rows of large perforate punctures, becoming finer towards apex, intervals flat, sparsely

punctate, moderately densely pubescent with shorter decumbent hairs, sparsely intermixed with longer erect hairs, color a little paler than the head and thorax, at middle a broad paler fascia irregular in outline. Body beneath slightly paler than above, metasternum moderately coarsely punctured, abdomen more sparsely. Legs pale testaceous, pubescent with shorter and longer hairs. Length, 8 mm.

Texas, one male in my possession kindly given to me a few years ago by Mr. Chas. Fuchs to whom this species is dedicated.

This species is to be placed near *punctata* Lec. with which it is confused in nearly all the collections possessing it. It differs from that species by the longer, coarser pubescence, large perforate elytral punctures, the apices separately rounded and the penultimate ventral segment broadly triangularly emarginate, the last broadly emarginate with the angles prolonged, the last dorsal is narrower than the last ventral and apparently broadly rounded at apex, or truncate, the vestiture being dense and obscuring this part.

Cymatodera van dykei, new species.

Brown, form slender, body apterous, surface sparsely pubescent, elytra with an indistinct pale transverse fascia about middle. Head very densely punctured, eyes feebly prominent. Antennæ scarcely longer than the head and prothorax. Thorax much longer than broad, constricted in front of middle and behind, base narrower than apex with distinct antescutellar impression, on each side tuberculate, surface transversely strigose in front coarsely punctured in male, in the female the punctation is very dense but very faintly strigose. Elytra very little wider at base than the thorax, humeri feeble, sides feebly arcuate, slightly broadening to apex, apices separately rounded; disk with rows of coarse punctures, closely placed, becoming slightly smaller to apex. Body beneath and legs paler, finely and moderately closely punctate. Length 11–12 mm.

Male. — Fifth ventral segment broadly moderately deeply emarginate, sixth small, parallel, triangularly emarginate, with the angles very much prolonged; to sixth dorsal elongate, very little narrower at apex which is truncate, with a very feeble notch at middle.

Female. — Fifth ventral nearly truncate, sixth broadly oval at tip, last dorsal broadly oval at tip.

California (Los Angeles Co.).

Two specimens kindly given to me by Dr. Van Dyke to whom this species is dedicated.

Related to *angustata* and *ovipennis* from both of which it is distinct by the different form of the fifth and sixth ventral segments; *angustata* which it more nearly resembles has shorter antennæ. The ten specimens of *ovipennis* before me have the thorax more compressed behind than *angustata* or *van dykei*.

Colyphus furcatus, new species.

Elongate, black, thorax roseate with a furcate black basal mark, elytra brown to piceous, very near to the suture and parallel with it a longitudinal yellowish-white vitta on each side. Antennæ black, joints 4–10, very feebly increasing in width, eleventh longer. Head black, very finely and sparsely punctured, clypeal region yellow, front with a semicircular impression. Thorax wider than long, constricted at apex and very strongly so near base, sides broadly arcuate, surface somewhat coarsely but very shallowly punctate, color roseate when alive or in well-preserved specimens, yellowish in old specimens, a furcate black mark at base. Elytra broader at base than the thorax, sides nearly parallel, not expanded, apex conjointly rounded, densely and moderately coarsely punctate, color brown to piceous, a yellowish-white vitta starting a little below the base to nearly to apex, closer to suture than to the side margin. Underside and legs black, except femora at base and thorax beneath reddish. Length, 6–6.5 mm.

Brownsville, Texas (San Tomas, Esperanza Ranch).

Types.—Four specimens in collection of the Museum of the Brooklyn Institute of Arts and Sciences.

This species resembles the Mexican *quadrilineatus* but according to the description differs by the elytra more parallel, the underside entirely black and the furcate mark at base of thorax. I have taken quite a number of this species but all the specimens are remarkably constant in the furcate spot at base of thorax, which in none of the specimens shows any variation; even in a small, poorly developed specimen from New Braunfels, Texas, this mark is plainly seen, although faintly.

Clerus palmii, new species.

Moderately robust, form of *abruptus*, black, shining; at middle of elytra, a yellow transverse fascia nearly reaching the suture and a little irregular in outline, apex pubescent with white hairs. The punctuation of head, thorax and elytra, except towards apex where it becomes finer the same, the fasciæ are more sparsely punctured than the rest of surface. The pubesence consists of very short sparsely placed, scarcely visible white hairs, intermixed with longer and darker hairs, long and white at sides of thorax, base of elytra and legs. Length,

Senator, Arizona.

One specimen kindly given to me some years ago by Mr. Chas. Palm, whose name I have given to this species as a slight recognition of favors received.

Closely resembles the black forms of *abruptus*, but lacks the two basal spots of that species, the thorax in *abruptus* is much more finely and sparsely punctured than the elytra, while the punctuation of thorax in *palmii* is as coarse as that of elytra, the yellow fascia on the elytra

is always more or less curved down near suture in *abruptus*, while *palmii* has this fascia straight. The Nicaraguan *æsopus* seems to be very near to *palmii*, but has the fascia curved down near the suture and in addition a yellow oblique line near apex. *Clerus crabronarius* Spin. which it resembles also somewhat is a larger and more robust insect, with the elytra very coarsly punctured.

Hydnocera tricolor, new species.

General form of *discoidea*, but larger and a little more robust, red; elytra covering the abdomen, a white fascia behind the middle; apex black, clothed quite densely with moderately long dark hairs. Antennæ red, eyes prominent. Thorax red, wider than long, apex strongly constricted, below the constriction strongly arcuate, narrower at base than at apex, surface very densely not coarsely punctured. Elytra wider than the prothorax at base, slightly narrowing to the apex, humeri distinct, apices serrate, broadly rounded, disk more coarsely punctured than the prothorax, apex more densely, given the surface a more scabrous aspect, red to about the middle, apical third black, the red and black divided by a white fascia, the latter with white hairs, the rest of surface with very short pale hairs intermixed with darker and longer. Abdomen black, legs black except anterior femora which are red, the middle and hind femora red with the apex black, sometimes nearly the entire femora black. Length, 4–4.5 mm.

Brownvsille, Texas.

Types.—Four specimens in Museum of the Brooklyn Institute. By the coloration this is easily known from any of the described species.

Hydnocera omogera Horn.

This species occurred at different places near Brownsville quite commonly. It is as variable in size and in extent of the yellowish white markings as *discoidea*. The spots in the smaller specimens are as a rule more feebly developed than in the larger specimens, in the latter there is mostly another yellowish white spot of variable size at one third from apex. Specimens with an additional spot behind the middle were also taken in Lower California with the typical form by Mr. Beyer.

Pelonium maculicolle, new species.

Form and size of *Cregya vetusta* Lec.; testaceous, clothed with semierect pale hairs, thorax maculate with black, elytra with base more or less black, on each side about middle of disk three black spots, the two upper ones oblique and near the suture, the two lower ones generally confluent, a broad black fascia, narrower towards suture and irregular in outline, at about apical two fifth. Antennæ eleven jointed, half as long as the body in the male, shorter in the female, club longer than the preceding joints in the male, shorter in the female, last three joints black. Head coarsely, densely punctured, black, with a longitudinal pale line, variable in distinct-

ness, eyes prominent. Thorax nearly as long as broad, narrower at base than apex, sides gradually widening from apex to about basal third, then suddenly narrowing to base, disk slightly convex, even, with a slightly impressed median line, somewhat coarsely and densely punctate, a black median line and three or four spots on each side from the middle to the base, the spots at sides more or less confluent. Elytra nearly three times as long as the thorax, slightly widening towards apex, apices separately rounded, very coarsely, irregularly punctured, the space between the black median spots and the fascia devoid of these punctures, the base with a large black spot on each, below the humeral umbone a smaller one, sometimes connected with the basal spot, at about middle one oblique black spot on each side near suture, below this two others, mostly connected assuming a zigzag form, at about apical two fifth a broad black fascia of irregular outline, narrower towards suture. Anterior femora at apex and anterior tibiæ at base black, middle and hind tibiæ sometimes with a black fascia at middle. Anterior tibiæ serrate, in the smaller specimens faintly. Length, 7–11 mm.

Brownsville, Texas.

Types.—Four specimens in the Museum of the Brooklyn Institute.

I have taken a considerable number of this species, which is in my experience the most common Clerid in this region. It occurred mostly on *Acacia flexicaulis* and is a very slow insect. *P. bilineicolle* Chev. and *quadrisignatum* Spin. are allied to this species but the eleven-jointed antennæ and other characters separate it from these two; it resembles *P. amabile* Spin. also, but the markings, the form of thorax and the elytral punctuation are different in the two species.

The median impressed line of the thorax is variable in distinctness, below this line is also sometimes a more or less elevated smooth space.

The two genera *Peloinum* and *Cregya* are very feebly differentiated, in *Peloinum* the tibiæ are externally serrate and in *Cregya* smooth, these differences are in some way bridged over by the above described species, the serrulation is not very strong in the larger specimens but extremely feeble in the smaller ones, and undoubtedly the same will be the case in some of the Mexican or Central-American species. Large specimens of *Cregya vetusta* Lec. have the front tibiæ outside irregular, not smooth.

Enaplium granulatipenne, new species.

Elongate black, elytra covered with small granules, red with two large black spots on each side which are usually confluent. Head black, mouth parts red, densely cribrately punctured; antennæ reaching to the middle of the elytra in the male, first seven joints as long as the first joint of the club, black, the first 4 or 6 joints reddish beneath. Thorax a little broader than long, densely somewhat cribrately punctured, sides arcuate, parallel for a very short distance at apex; black, front and hind angles narrowly red. Elytra distinctly broader than the thorax at base, sides

slightly arcuate, widest at about apical third, apices separately rounded; disk slightly depressed, covered with small granules, transversely confluent at basal third, obliterated at basal region, which is more shining, red, with two large black spots on each side becoming largely confluent in most of the specimens. Underside and legs black, femora at base and sometimes the first ventral segment at sides, or the first two or three segments at sides and middle red. Length, 4.5–7 mm.

Brownsville, Tex. (Las Boragos). Types, six specimens in the Museum of the Brooklyn Institute.

The spotted forms resemble *quadrinotatum*, but differ by the densely and roughly sculptured thorax, and the first few ventral segments more or less red; *quadriguttatus* and *quadrinotatus* have the underside entirely black in all the specimens I have seen. I have taken about 15 specimens of this fine species on the flowers of the mesquite, but only a few with the spots well defined, in the rest these are confluent and in some specimens the elytra is black with a narrow space at base and side margin red. In regard to the distinctness of the two species *quadrinotatus* and *quadriguttatus* (if they are correctly identified) I have some doubt. In Dr. Horn's collection, as well as in all the others I have seen, the form with black thorax is *quadripunctatum* and with red thorax *quadrinotatum;* but there are intergrades which connect these.

Enoplium nigrescens, new species.

Elongate, red, with erect not densely placed hairs, antennæ, palpi, femora at apical third, tibiæ and tarsi black, each elytron with a broad black vitta, very distinct at base, but gradually fading into red towards apex. Antennæ longer than head and thorax, with the intermediate joints as long as the first two joints of the club, black, first joint beneath reddish. Head densely roughly punctured, sides straight at apical fifth. Thorax broader than long, then arcuately narrowing to apex, apical and hind angles rounded; disk slightly convex, very densely and moderately coarsely punctured. Elytra a little broader than the thorax at base, gradually widening to apical third, then arcuately narrowing to apex, apices separately rounded; disk feebly convex, coarsely cribrately punctured, punctures gradually but little smaller towards apex, a black broad vitta, very distinct and intense at base but gradually fading into red towards apex. Body beneath red, abdominal segments indistinctly fasciate with black, femora at apex, tibiæ and tarsi black. Length, 5 mm.

Brownsville, Tex. (Esperanza Ranch). One specimen in the Museum of the Brooklyn Institute.

In a specimen collected by Dietz the black vitta is more distinct than in the specimen taken by me and judging from this we may find specimens with the vittæ well defined from base to apex and going to the other extreme, specimens may be expected with entirely red elytra;

if I remember aright there is a specimen entirely red with Mr. Chas. Dury, collected in Arizona and it may belong here.

Elaphidion subdepressum, new species.

Brown, somewhat depressed, thorax very coarsely, at middle of disk in front confluently punctured, without callosities, pubescence very sparse, forming six denser spots, two in front of middle, two smaller behind middle, and one on each side at middle of sides; elytra sparsely pubescent with a somewhat arcuate fascia of denser white pubescence at middle. Head very coarsely, rugosely punctured. Antennæ as long as the entire body, brown, third and fourth joints with a small spine, joints slender, fifth to eleventh flattened, subangulate at apex. Palpi subequal, last joint triangular. Thorax as long as broad, somewhat depressed on the disk, sides arcuate, a little narrower at base than at apex; disk very coarsely punctured, in front the punctures are confluent, without callosities, very sparsely pubescent with white hairs, six spots of denser hairs, two situated at apical third, two at basal third, and two at sides at middle. Elytra broader than the thorax at base, punctuation very coarse and dense around scutellum, sparsely at sides, finer towards apex, which is conjointly rounded and without spines, a slightly arcuate fascia at middle, formed by more densely placed white hairs. Abdomen and femora more sparsely and finely punctate than elytra at base, sparsely pubescent. Length, 8 mm.

San Felipe, Lower California. One specimen from Mr. G. Beyer, in the Museum of the Brooklyn Institute.

The spinous antennæ, thorax somewhat depressed without dorsal callosities, apices of elytra and tibiæ without spines, place this species near *mæstum* Lec. from which it differs in much smaller size, thorax and base of elytra more coarsely and roughly punctured and the white elytral fasciæ.

Pentanodes, new genus.

Differs from *Tetranodes* Linell by having the eyes ovate, slightly truncate inside and in the male joints three to seven of the antennæ incrassate and clavate. The antennæ of the females have these joints simple.

Pentanodes dietzii, new species.

Reddish, a transverse ivory fascia at middle, apical half of elytra, abdomen and tibiæ black, very sparsely clothed with long hairs. Head moderately coarsely, densely punctured; eyes small ovate, slightly truncate inside, coarsely granulate. Antennæ as long as the body in the male, shorter in female, very finely pubescent, eleven jointed, first joint moderately stout, as long as the fourth, second small, third one third longer than fourth, third and fourth strongly incrassate, fifth and sixth subequal, each longer than fourth, incrassate, but less so than the third and fourth, seventh slightly smaller, clavate, narrower than any of the preceding joints. Thorax longer than twice the width, slightly longitudinally arcuate, densely longitudinally strigose; base constricted, with a transverse band of white hairs. Elytra slightly wider than the thorax, parallel, strongly depressed before the middle, at base on each side near suture a strong tuberculiform elevation, before the middle a transverse elevated ivory

vitta, attaining the side margin, but not the suture. The punctuation is very sparse, consisting of only a very few coarse punctures, each bearing a hair. Apex of metasternum with a band of fine white hairs. Femora strongly clavate, tibiæ slightly curved not carinate. Length, 5 mm.

Brownsville, Texas, two specimens, male and female in coll. Dietz.

The female has the antennal joints four to seven simple, but these joints are darker, otherwise it is exactly like the male.

Tetranodes niveicollis Linell.

Occurred commonly near Brownsville, Tex., on *Acacia farnesiana* and *flexicaulis*, but more frequently on the former. The female, which was not known to its describer, has all the antennal joints simple.

The following is the table of genera of the group Anaglypti as given in "The Classification" with the above mentioned or described genera added.

Group III. Anaglypti.

Second joint of antennæ equal to fourth.
- Antennæ not spinose, elytra without ivory spots..... *Microclytus.*

Second joint of antennæ short, third longer than fourth.
- Elytra without ivory spots.
  - Eyes oblique, emarginate..... *Cyrtophorus.*
  - Eyes entire, rounded..... *Tillomorpha.*
- Elytra with transverse ivory bands.
  - Antennal joints male and female slender, not inflated..... *Euderces.*
  - Four or five joints of male antennæ inflated.
    - Eyes emarginate, pointed behind; joints 3–6 of male antennae inflated, of female slender..... *Tetranodes.*
    - Eyes entire, oval. Male antennal joints 3–7 inflated, slender in female. *Pentanodes.*

Obrium brunneum, new species.

Elongate parallel very shining, brown, sparsely hairy. Head including the eyes smaller than the elytra at base, coarsely and densely punctate, a fine impressed median line, clypeal suture deeply impressed. Antennæ a little longer than the body, sparsely pubescent, first joint clavate as long as the second and third together, third and fourth equal, fifth to eleventh longer. Thorax about equal in length and width, strongly obtusely angulated at middle of sides, then obliquely narrowing to base which is constricted; disk flat, a vague, shallow impression on each side near the basal constriction surrounding a slight elevation, sparsely, moderately coarsely punctate. Elytra slightly widening towards apex which is broadly rounded, a little more coarser and closer punctate than the thorax, the punctuation confused, finer towards apex, sparsely pubescent. Abdomen sparsely, finely pubescent, legs sparsely clothed with longer hairs. Length, 7 mm.

Sta. Rosa, Lower California, one specimen from Mr. G. Beyer, in the Museum of the Brooklyn Institute.

Resembles closely the figure of *Obrium cribripenne* Bates in Biol. Centr. Am., vol. V., but while the elytra is brown in the figure it is according to the description "nigro-violaceis."

Differs from Linell's *mozinnæ* by the uniform brown color, the confused punctuation of elytra and the smaller head.

Both species *mozinnæ* and *brunneum* may be considered intermediate between the true *Obrium* and *Phyton* both have the apical part of thorax little wider than the basal part.

Neoclytus magnus, new species.

Elongate brown; thorax darker, at middle with a yellowish white fascia, base, apex and sides densely pubescent with white hairs; elytra with two straight and one oblique white fascia. Head very finely and very densely punctured, above the antennal tubercles and cheeks coarsely punctured, antennæ reaching the first elytral fascia, joints three and four slender, the outer joints shorter and broader and gradually decreasing in length. Thorax as long as broad, base and apex equal, sides slightly arcuate, disk moderately coarsely and densely punctured, with three rows of well defined transverse rugæ, one at middle and one on each side, below which the disk is depressed, those at side sinuate at middle and oblique at base. Elytra two and a half times as long as broad, narrower than the thorax at middle, sides nearly straight, slightly narrowing to apex which is arcuate truncate, the sutural angle rounded, the outer slightly acute. Beneath clothed with white hairs, denser at sides of prosternum, metasternum and abdomen, the latter finely and densely punctured. Legs long and slender, femora without spines, hind tibiæ and tarsi compressed, first joint of hind tarsi longer than the following ones together. Length, 20 mm.

Ensenada, Lower California. One female from Mr. G. Beyer in the Museum of the Brooklyn Institute.

Another specimen in Mr. Beyer's collection has the thorax and elytra blackish, the base of elytra reddish-brown and the bands yellow, but besides the color there is no other difference.

Ataxia spinicauda, new species.

Elongate, nearly parallel, piceous, elytra broadly, deeply and conjointly emarginate and hispinose at apex, covered densely with white and ochreous short hairs. Head densely clothed with white and ochreous hairs; antennæ nearly as long as the entire body, basal joints piceous, the following paler at base, densely pubescent with fine short white hairs, with larger hairs sparsely intermixed. Thorax nearly as long as wide, feebly narrower at apex than at base, sides slightly arcuate with a small spine at middle, disk finely and densely punctured, with a few larger punctures intermixed, a longitudinal impressed line interrupted at middle, densely clothed, white short hairs generally abraided at middle and two denuded round spots on each side near base. Elytra three times as long as the thorax, slightly narrowing to apex, apices conjointly, deeply, broadly emarginate and spinose; disk with a costa near suture, obliterated at base, finely and densely punctured, with a few coarse punctures

intermixed, densely pubescent with short white and ochreous hairs. Beneath and legs densely pubescent with white and ochreous hairs. Length, 9-11 mm.

Key Largo, Florida, two specimens from Mr. G. Beyer in the Museum of the Brooklyn Institute.

In form and sculpture like *crypta* but the pubescence is different and the apex of elytra is bispinose. According to the description it is similar to *A. spinipennis* Chev. from Cuba, but that is described as olivaceous, below irrorate with white and black, the thorax with a median longitudinal costa, length 19–20 mm. and is made the type of the genus *Præcha* by Thomson.

Thryallis undatus Chev.

This fine insect occurred near Brownsville on the branches of a species of *Celtis* from April 15 to July 12, but is by no means common.

The genus *Thryallis* is a member of Lacordaire's group Anisocérides, included by Bates in his group Acanthoderini. The species of this genus are distinguished by their short, broad form, antennæ eleven-jointed in the male, ten-jointed in the female, with first joint attenuate at base, pyriform at apex, joints three and four very long, from joint six rapidly decreasing in length, the thorax is feebly tuberculate at sides. Lacordaire principally separates the Anisocérides from the Acanthodérides by the open intermediate cotyloid cavities, closed in the latter tribe, but according to Bates are not quite closed in *Acanthoderes* and allied genera.

Cryptocephalus arizonensis, new species.

Head, thorax and legs reddish, elytra blue, epipleuræ yellow from base to the middle. Head reddish yellow, front impressed on top, around the impression coarsely punctate, clypeal region smooth; eyes elongate, emarginate inside, antennæ longer than half the entire body. Thorax strongly transverse, convex, sides slightly rounded, basal angles sharp, prolonged backwards, base slightly arcuate, disk finely and densely punctate, with larger punctures intermixed, color red, basal margin narrowly bordered with black, basal angles yellow. Scutellum black, finely punctured, broader at base than at apex, at middle of base a deeply impressed fovea. Elytra as wide as the thorax, blue, with rows of large, deep, closely placed punctures, finer towards apex, regular on the disk and confused at sides, marginal and submarginal striæ regular at sides confused at apex, intervals flat, very finely punctate; epipleuræ yellow to the middle. Pygidium black, sparsely pubescent and coarsely punctate. Underside black, prosternum, sides of thorax beneath metasternum in front of middle and first abdominal segment between the coxæ yellow; prosternum convex at middle, lobed in front, not sinuate nor toothed near the front angles, bispinose and concave behind. Abdominal segments coarsely punctate, the punctures placed in one or two rows, sparsely pubescent, last abdominal segment with a broad round concavity pubescent around the sides with longer erect hairs. Length, 5.25 mm.

Pinal Mountains, Arizona, two specimens from Mr. Chas. Palm in the Museum of the Brooklyn Institute.

To be placed near *sanguinicollis* in Leconte's table from which the larger size, more robust form blue elytra with yellow epipleuræ will readily distinguish it.

Cryptocephalus atrofasciatus Jacoby.

Originally described from Mexico, Mr. Palm has specimens of this variable species from Globe, Arizona. The specimens with pale elytra and fulvous bands resemble superficially *fulguratus*, but are larger, more elongate and thorax distinctly punctate. The typical form has the elytra with three undulated black bands, but these bands become in some specimens more or less longitudinally confluent, of which the most extreme form which I have seen has the elytra black, with a few pale spots at base, two very small ones at apical third and the apex narrowly yellow, which goes even a little further than the variations observed by Mr. Jacoby.

Cryptocephalus quatuordecimpustulatus Suffrian.

Occurred frequently I believe on *Acacia flexicaulis* in Brownsville, Texas. It is about 3 mm. long, yellow, thorax nearly impunctate, elytra with striæ of not deeply impressed punctures, scutellar stria absent, sutural striæ short, obsolete at base, first stria united with the second slightly below the middle, joining the fourth at apex, fifth and sixth disconnected at middle, the lower part has the two striæ united at base and apex, the upper part of the two striæ is united at its apex by an oblique row of punctures, leaving between the two parts a slightly raised smooth space, the seventh and marginal striæ entire; the yellow color is divided on each elytron by brown bands into eight large spots, three at base of which the marginal spot is the smallest, two below these, then again two and at apex one. Abdominal segments somewhat coarsely and sparsely punctate.

Cryptocephalus brunneovittatus, new species.

Light yellow to fulvous, elytra with seven well defined regular striæ, first stria abbreviated at middle, scutellar striæ long, obliterated at base, alternate intervals more or less fulvous brown or rarely black. Head coarsely and sparsely punctured, an impressed median line not reaching the clypeal suture; eyes large elongate, broadly emarginate inside, antennæ reaching behind the middle. Thorax shining, convex, broader than long, sides slightly arcuate, narrowing to apex, hind angles prolonged, base arcuate, disk extremely finely punctured, with a few larger punctures intermixed, color yellow or fulvous, paler at base. Elytra about twice as long as thorax with regular rows of

somewhat deeply impressed, moderately large punctures, which become finer towards apex, scutellar stria long obliterated at base, first stria short, running to about the middle, second entire, joining the seventh at apex, third and fourth meeting at apex, fifth and sixth also joining at apex, seventh continued along apex and joining the second near entire, eighth or marginal stria continued around apical marginal to the suture by a few punctures, color yellow or flavous, alternate interspaces more or less brown, intervals nearly smooth, shining. Pygidium sparsely coarsely punctate. Prosternum nearly truncate in front broadly not deeply emarginate behind which causes the prolongation of the basal angles. Abdomen shining, punctuation not close, males with the usual large round impression on last segment. Length, 3–4 mm.

Brownsville, Texas, where it occurred at different places.

This species is to be placed near *defectus* with which it is confused in several collections, but the regular seventh stria will seperate it from that species, which according to the description has the seventh stria reduced to a small hook attached to the eighth in front of the middle. Although easily recognizable I was not able to find any description in the "Biologia" or in Suffrian's "Zur Kenntness d. N. A. Cryptocephalen," that would satisfactorily fit this insect. A moderately large number shows that the arrangement of the striæ is very constant, in all of the specimens there is not even the slightest attempt of a displacement or interruption of the seventh stria to be seen.

Fidia clematis, new species.

Brown, subopaque, pubescence cinereous, not very dense. Head moderately, coarsely, not densely punctured. Antennæ slender, piceous, joints three to six, paler at apex, outer joints black. Thorax nearly as long as wide, narrower in front than at base, sides arcuate, disk convex, moderately coarsely not closely punctured. Elytra about twice as long as the thorax, with rows of closely placed, but not very close punctures, intervals flat, finely transversely rugose. Body beneath brown, sparsely pubescent at middle, denser at sides. Legs a little paler, extreme apex of tibiæ and tarsi black. Length, 5–5.5 mm.

Occurred at Brownsville on different species of vines.

The color is variable which may be from very dark brown to fulvous. It is of the same form as *cana* but is more finely punctate, the pubescence is more cinereous, denser on the thorax and uniform, not forming a denser line at middle of thorax.

Fidia plagiata Lef.

This species occurs in Arizona, and has to be added to our list; it is easily recognizable from any of our species by the characters given in the following table:

Pubescence very fine, short and sparse, elytral striæ faintly impressed on the disk and at apex, intervals as coarsely punctate as the striæ; a longitudinal red stripe on

each elytron at sides, starting from base and extending to the middle, and a red spot at apex of variable size..... *plagiata.*

Pubescence longer and coarser, elytral striæ very distinct, color uniform.

Prothorax more finely punctured, color fulvous or brown.

Pubescence of head and thorax longer and coarser, head without a deeply impressed fovea, or with at most a faintly impressed short line, form shorter and a little more robust, color brown..... *clematis.*

Pubescence of head and thorax shorter, finer, head with a deeply impressed fovea at middle, color fulvous..... *viticida.*

Prothorax more coarsely punctured, color piceous or black.

Punctures of thorax very closely placed, pubescence of thorax, uniform, femora at base and sometimes the tibiæ pale..... *longipes*

Punctures of thorax well spaced, pubescence forming a denser line on the median line of thorax, legs black..... *cana.*

Myochrous magnus, new species.

Elongate, fulvous, with slight æneous tint, covered densely with yellowish scales. Head covered densely with yellowish and brown scales, concealing the surface sculpture, front longitudinally finely impressed. Antennæ pale, nearly twice as long as the thorax, joints three to six slender elongate, the last five joints broader. Thorax as long as broad, slightly arcuate and tridentate at sides, coarsely, closely punctate, covered densely with yellowish scales, lighter in color at sides. Elytra not quite twice as long as broad, with rows of large closely placed punctures, becoming smaller and confused at apex, the punctures larger than the interstices, covered densely with yellowish and brown scales. Underside coarsely, more sparsely punctured, covered not densely with yellowish white scales, which are more hair-like on the abdomen at middle. Legs stout, sparsely clothed with whitish scales, anterior tibiæ with a strong tooth at apical third; tarsi broad and short, second and third joints pubescent beneath, third very densely with yellowish hairs. Length, 6.5–7 mm.; width, 3 mm.

Brownsville, Tex., June.

Types. — Four specimens in the collection of the Brooklyn Museum.

M. longulus Lec. to which only this species can be compared is said to have the thorax longer than broad, but it will be found to be as given in the following table:

Thorax distinctly tridentate at sides.

Thorax wider than long; vestiture of surface not dense, easily removed. *denticollis.*

Thorax as wide as long; vestiture close and persistent.

Anterior tibiæ with a strong tooth below the middle; larger species. *magnus.*

Anterior tibiæ without tooth, smaller species..... *longulus*

Thorax not dentate at sides..... *squamosus.*

Spermophagus eustrophoides, new species.

Oval ferruginous, clothed uniformily with ochreous hairs. Antennæ yellowish testaceous, subserrete, serration beginning with the fourth joint. Head oblong oval,

densely not coarsely punctate, a smooth median carina between the eyes more or less distinct. Thorax broader than long, sides arcuately narrowing to apex, which is truncate, surface sparsely and coarsely punctured with finer densely placed punctures intermixed, pubescence moderately dense and ochreous. Elytra oval, about one fifth longer than wide, sides slightly arcuate, apices separately rounded; surface deeply striate, punctate, intervals flat, finely punctured, clothed densely with ochreous hairs. Pygidium coarsly somewhat muricately punctate, moderately densely clothed with ochreous pairs, which from a denser line longitudinally at middle. Underside and legs concolorous densely clothed with ochreous hairs, finer and shorter on the legs. Hind femora with a blunt tooth on the inside one third from apex, hind tibiæ with two unequal long spurs, the outer one the longest. Length, 6 mm.

Lake Worth, Florida.

Six specimens, two in the Museum collection and four in coll. Dietz. They were all collected by the late Ottomar Dietz. It differs from *robiniæ* by the toothed hind femora, uniform vestiture and shorter, more oval form, in which it resembles some species of the Melandrid genus *Enstrophus*.

Bruchus julianus Horn.

This gigantic *Bruchus* occurred quite commonly in July on *Acacia flexicaulis*, in the large seed pods of which it undoubtedly breeds. The examination of the type saved me from describing this species again. Dr. Horn's types are small starved specimens 5–6 mm. long while my specimens range from 8–14.5 mm., 12–14 mm. being the average size, while only a few are of the smaller size. The deeply impressed median line, the uneven slightly sulcate surface of the thorax and the three dentiform elevations on each side of base of elytra on which I laid some stress and which Dr. Horn did not mention in his description, are only faintly indicated in the smaller specimens. I have distributed specimens under the manuscript name *flexicaulis*.

Bruchus arizonensis, new species.

Black variegated with white and ochreous pubescence; thorax elevated at middle and with a slight median groove. Head elongate oval, constricted behind the eyes, densely punctate, front carinate, around the eyes and sides of clypeus with moderately long, white hairs. Antennæ black, joints five to eleven suddenly broader than the basal joints. Thorax slightly companulate, disk very connex in front, behind the middle with two large tuberculiform elevations, these are separated by a median groove which does not quite extent to the apical or basal margins, surface densely clothed with white and ochreous hairs, summit of the two tubercles and the declivous front of the convexity black, devoid of pubescense. Elytra as long as broad, disk subdepressed, sides very slightly rounded, surface striate, striæ finely punctured, intervals densely punctate, flat, except the second which is slightly convex, variegated with white, ochreous and black densely placed hairs, the black hairs forming a con-

spicuous fascia at middle, irregular in outline, broad at sides and interrupted on the disk at the first and third striæ. Pygidium convex at apex, densely pubescent with white hairs, a transverse line of black hairs at middle. Legs piceous, tibiæ paler at apex, hind femur on the inner side near apex with a small tooth. Length, 3.5 mm.

Pinal Mountains, Arizona.

One specimen from Mr. Chas. Palm in the Museum of the Brooklyn Institute.

This species does not fit in any of the groups proposed by Dr. Horn, it is best placed near *mimus*, having the thorax similarly elevated and grooved, but has only one small tooth on the hind femur. In the specimen from the above named locality the pubescence on the apex of the pygidium is rubbed off, in another specimen from Yuma Co., Ariz., in my possession there are two short black lines on each side of the apex as in *prosopis* and the black transverse line at middle is only faintly indicated and the hind femora and tibiæ are more reddish.

Bruchus gibbithorax, new species.

Black, thorax and elytra densely clothed with white and ochreous hairs, black hairs forming large patches and lines on the elytra, thorax gibbous in front. Head elongate oval, clothed with white hairs concealing the surface sculpture, front carinate; antennæ black, joints five to eleven much broader than the preceding. Thorax convex, gibbous in front, densely clothed with ochreous and white hairs, an antescutellar spot of white hairs, front of the gibbosity black. Elytra about as broad as long, sides very slightly arcuate, disk striate, variegated with black, ochreous and white hairs; the ochreous and white hairs forming the general pubescence, the black forming distinct marks as follows: a large spot at humeral angle, a large broad fascia about middle, from the side margin to the third stria and a large spot at apex, between the humeral spot and the median fascia is a smaller spot situated on the second stria and a still smaller on the fourth stria, between the median fascia and apical spot is also a smaller one on the second stria, these two smaller spots situated on the second stria are connected by a line of white hairs. Pygidium slightly convex, densely clothed with white hairs. Underside densely pubescent with white hairs, concealing the surface sculpture. Femora reddish, tarsi black; hind femora with a small tooth.

Pinal Mountains, Arizona.

Two specimens from Mr. Chas. Palm in the Museum of the Brooklyn Institute.

This species can not be compared with any of our North American *Bruchus*; it is near *arizonensis* above described, but is very much smaller, the markings though similar are better defined, the median line and the two tuberculiform elevations of the thorax so prominent in *arizonensis* are not present here.

Bruchus texanus, new species.

Black, variegated with brown, thorax slightly tumid at middle near base, eyes very deeply emarginate. Head oblong oval, moderately coarsely densely punctured longitudinally carinate between the eyes, sparsely clothed with white hairs in the clypeal region, eyes very deeply emarginate, antennæ black, joints five to eleven much broader than the preceding. Thorax convex, slightly tumid at middle near base as long as broad, sides nearly straight, base sinuate, lobed at middle, apex truncate, surface densely clothed with brown and white pubescence, the brown predominating, an antescullar spot of white hairs, which fill out a slight impression. Elytra nearly as long as wide, striate, densely clothed with brown and white hairs, the brown more conspicuous in two large spots on each elytron, one at middle at sides, and on eat apex and one more indistinct oblique narrow one, from the humeri to the suture. Pygidium densely clothed with brownish and white hairs, the white more conspicuous in a longitudinal line at middle. Beneath and legs black, finely pubescent with white hairs, denser on the abdomen. Hind femur with a small tooth. Length, 2 mm.

Described from one specimen taken on May 2, at Esperanza Ranch, near Brownsville, Texas. Related to the two above described species but narrower, with entirely black legs and thorax not gibbous in front. The convex uneven thorax, the slight short median impression near base of thorax and the femora with one tooth brings this near *arizonensis*, with which it ought to form a separate group between Dr. Horn's Group II and III.

Some of the *Bruchus* may have been described from Mexico, but the descriptions are so extremely short, that it is very difficult to identify the insects satisfactorily.

Pelecotomoides nubilus Gerst.

A small number of this interesting Ripiphorid were beaten from different trees at Esperanza Ranch, most of them in July. Specimens are recorded from Panama as having "ill-defined transverse or oblong patches of a fuscous color" but all my specimens belong to the unicolorous form. This insect is of a grayish fuscous color, eyes large, divided in front by a very narrow line, antennæ with the first four joints simple, the remaining flabellate in the male, strongly serrate in the female. My specimens are from 5.5–9.5 mm. The genus *Pelecotomoides* is distinguished from *Toposcopus* by the entire eyes, which are in *Toposcopus* completely divided and from *Pelecotoma* by the strongly serrate claws. The following table will help in the identification of the Evaniocerini occurring in our fauna.

Eyes feebly emarginate.

Claws feebly bidentate, antennæ flabellate in the male or serrate in female from the fourth joint; hind tibiæ at apex with one small spur, third and fourth tarsal joints equal; eyes widely separated in front...*Pelecotoma flavipes* Wells.

Claws strongly serrate, antennæ flabellate in male, serrate in female from the fifth joint; hind tibiæ at apex with two moderately long sharp spurs, fourth joint twice as long as the third, eyes separated in front by a very narrow line. *Pelecotomoides nubilus* Gerst.

Eyes entirely divided by a broad plate.

Claws serrate, antennæ flabellate in the male, serrate in female from the fourth joint..... *Toposcopus wrightii* Lec.

Constrachelus rubescens, new species.

Blackish brown, sparsely clothed with white hairs, and denser reddish-yellow hairs at base of thorax, base and apex of elytra. Beak slender, curved, as long as the head and thorax, carinate at middle, striate at sides. Head coarsely punctured, clothed sparsely with reddish hairs which extend to the middle of the beak. Prothorax wider than long, slightly constricted in front, sides feebly arcuate, base bisinuate, disk carinate, densely rugosely punctured, clothed with white and reddish-yellow hairs, the first very sparse, the latter more densely near base. Elytra nearly twice as wide as the thorax, base sinuate, humeri broadly rounded disk with rows of coarse, closely placed punctures, alternate interspaces, carinate, carina of the third interval twice, but not abruptly interrupted, that of the fifth very feeble; surface blackish piceous, with irregular paler spots, clothed sparsely with white hairs and more densely at apex and base with reddish-yellow hairs. Abdomen shining, coarsely and sparsely, last ventral more densely punctured and with a shallow impression at middle. Femora armed with a small tooth, anulated with reddish-yellow hairs. Claws divergent, toothed. Length, 3.15–3.5 mm.

Brownsville, Texas (Esperanza Ranch, San Tomas). Four specimens in the Museum of the Brooklyn Institute.

The small size and the coloration will make this species easily recognizable from any of our *Conotrachelus*. It is intermediate between Leconte's Division I, *A* and *B* by having the costæ on the third interval interrupted and the femora unidentate. The species is not a common one, only a small number were taken during the entire time of my stay.

Chalcodermus semicostatus, new species.

Oval, convex, piceo-æneous, antennæ ferruginous, elytra strongly costate at apical half only. Head finely punctate, eyes nearly contiguous, separated by a very narrow line; beak as long as head and thorax, slightly curved, finely punctate, punctures slightly confluent at sides; antennæ inserted at middle. Prothorax slightly broader than long, gradually narrowing to apex, sides nearly straight, constricted in front, base bisinuate; disk coarsely punctate, denser and somewhat confluently at sides, intermixed sparsely with smaller punctures, at middle a narrow smooth median line. Elytra very little wider than the thorax at base, feebly narrowing to apex, humeri slightly oblique, disk with series of large not closely placed punctures, interstices sparsely punctate, very feebly convex at basal half, becoming strongly costate from about middle to apex. Legs stout; femora closely and coarsely punctate, with

a moderately long sharp tooth, tibiæ strigose punctate, slightly curved, front pair broadly dilated within about middle, middle and hind pair sinuate within near apex. Abdomen shining, coarsely not densely punctate. Length, 3.5–4 mm.

Four specimens, Brownsville, Texas (Esperanza Ranch), May, June and July, in the Museum of the Brooklyn Institute.

This species is very distinct from the North as well as the Central American species by the general form, strongly costate apical half of elytra and the punctuation of the prothorax.

Chalcodermus serripes Fåhr.

This species occurs from Brownsville, Texas to Brazil. It is easily distinguished by its narrow, somewhat compressed, elongate elytra and the tibiæ serrulate within. The color is æneocupreous, elytra rufous with a slight metallic tint, with rows of large punctures, and the thorax oblique-strigose.

Chalcodermus vittatus Champ.

Specimens of this species, which is described from Guatemala, were taken at Brownsville (San Tomas and Esperanza Ranch from May to July).

It is a short, oval insect, æneo-cupreous, elytra rufous, with the suture, the second interstice at middle, the fourth at apex and base, and the sixth for nearly the entire length, æneous. In one specimen the fifth at apex is also æneous. The thorax is oblique-strigose.

Toxotropis irroratus, new species.

Blackish brown, irrorate with yellowish white hairs on thorax and elytra. Head and prothorax densely punctured, the ante-basal ridge of the latter feebly arcuate, color blackish brown, with patches of white hairs. Eyes moderately deeply emarginate. Elytra with rows of moderately coarse punctures, intervals flat densely punctured, surface densely clothed with brown hairs, concealing the surface sculpture, irrorate with patches of white hairs, forming an irregular arcuate fascia near base. Body beneath black, moderate densely clothed with white hairs. Femora piceous, tibiæ and tarsi fulvous, the latter at apex black, claws deeply cleft, the inner portion convergent. Length, 2.5–3 mm.

Brownsville, Texas (Esperanza Ranch and San Tomas), April to June. Four specimens in the Museum of the Brooklyn Institute.

This species will readily be distinguished from our other species by the deeply cleft claws; the eyes seem to be also more emarginate. Both characters somewhat bridge over the differences between the genera *Toxotropis* and *Gonops*.

Toxotropis submetallicus, new species.

Blackish brown with a slight metallic tinge on elytra, clothed with brown, fulvous and white pubescence, the white forming a not clearly defined arcuate fascia near base and irregular fasciæ at apex. Head densely punctured, densely clothed with brown, fulvous and white hairs; eyes rounded, not deeply emarginate; antennæ short, black, nearly reaching to the basal carina. Thorax in its widest part broader than long, sides slightly arcuately narrowing to apex, ante-basal ridge arcuate forming a broad lobe at middle, surface densely punctured and clothed densely with white, fulvous and brownish hairs. Elytra not broader than the thorax in its broadest part, with rows of moderately coarse punctures, intervals flat, densely punctured, surface clothed with thin brownish, fulvous and white hairs, the white hairs forming on each side near base an arcuate fascia, one behind the middle and at apex not clearly defined. Beneath black, densely punctured, pubescence white, not very dense. Femora, apex of tibiæ and tarsi black, claws deeply cleft, the inner portion convergent. Length, 2.25 mm.

Brownsville, Texas (Esperanza Ranch and San Tomas, May and June). Four specimens in the Museum of the Brooklyn Institute.

This species is very close to the preceding but differs in the more arcuate transverse carina of the thorax, the eyes slightly less deeply emarginate and the pubescence much finer and sparser, which does not conceal the surface sculpture, permitting always the metallic tinge of the elytra to be visible; the white hairs form also more distinct fasciæ as in *irroratus* but are not very clearly defined. It has the same deeply bifid claws as *irroratus*.

Gonops fissunguis Lec.

I have taken a few specimens at Brownsville which agree with Dr. Leconte's description of this species as far as it goes.

Phanosolena, new genus.

Head as long as broad, beak emarginate in front, as long as the head. Antennæ longer than the body in the male, shorter in the female, inserted in cavities which are sublateral and visible from above, situated close to the eyes. Eyes small, moderately coarsely granulate, rounded. Prothorax nearly as long as broad, gradually narrowing to apex, ante-basal carina obtusely flexed at sides. Scutellum small. Elytra slightly wider than the thorax at base, convex, nearly twice as long as wide at base, apex conjointly broadly, but feebly emarginate. Legs slender, tibiæ and tarsi subequal in length, first joint of tarsi longer than the two following, second covering the third, of which only the lobes are visible, last joint elongate, claws bifid. Pygidium vertical, oval. Mesosternum short, metasternal episternum narrower at apex than at base.

Type. — Phanosolena nigrotuberculata.

The antennæ are not strictly laterally inserted, the cavities extending on the surface of the beak close to the eyes and are plainly visible from above. By the transverse carina being ante-basal this

genus is best placed in the Tropiderini, differing from all our genera of this tribe in the position of the antennal cavities.

Phanosolena nigrotuberculata, new species.

Black beneath, ochraceous above, variegated with black patches on thorax and elytra. Head as long as wide, beak as long as the head, emarginate at apex with the angles rounded; antennal cavities open, not covered by the sides of the beak extending slightly on the disk and situated close to the eyes. Eyes lateral, small, rounded. Antennæ longer than the body in the male, shorter in the female. Thorax nearly as long as broad gradually narrowing to apex, sides slightly arcuate, transverse carina ante-basal, obtusely flexed at sides, disk at middle pale, with a small tubercle, densely punctate, at sides black, surface clothed with ochreous and white hairs. Elytra twice as long as thorax, slightly wider than the thorax at base, apex conjointly broadly, but feebly emarginate, disk with rows of coarse, closely placed punctures, at base on each side of scutellum one large tubercle, the third costa behind middle for a short distance slighly elevated, color ochraceous, the two basal tubercles, the two costiform elevations, a large spot at sides and at apex black, pubescence yellowish white between the basal tubercle and the costiform elevation a line of white hairs. Femora in great part and tibiæ at middle black. Length, 2.5 mm.

Three specimens, Brownsville, Texas (Esperanza Ranch and San Tomas), in the Museum of the Brooklyn Institute.

Male antennal joints three to seven long, slender, equal among themselves, eight to eleven forming a club, the three last ones very small, the eighth slightly shorter than seventh, but widening to apex. Joints three to seven in the female slightly decreasing in length, the four last joints forming a club which is broader than that of the male.

Anthribus bipunctatus, new species.

Cylindrical, clothed with whitish, ochreous and black scale-like hairs, yellowish-white hairs more dense at base of elytra forming a band and extending along sides to middle, apex also paler and with a black sutural spot, thorax and elytra with erect brush-like tufts. Head and beak with white ochreous scales. Thorax as long as wide at base, slightly narrower and arcuate in front, nearly parallel behind, side margin extending to the middle, base slightly arcuate, disk finely and densely punctured, surface with white, ochreous and brown scale-like hairs; on each side near hind angles, a rounded black spot, three tufts of brown scale-like hairs transversely placed at middle, a line of denser yellowish-white hairs starting on each side of median tuft and divergent towards apex, a smaller oblique one near the outer tuft and meeting the median line at middle. Elytra with rows of coarse punctures, intervals finely punctate, vestiture whitish and ochreous, a row of three erect tufts of pale brown scale-like hairs and one nearer the apex but outside of this row, the distance between the first and second, and second and third equal, apex paler with a black sutural spot. Beneath moderately densely clothed with pale ochreous hairs. Tibiæ slightly annulated with ochreous and darker hairs and some longer pale hairs intermixed. Length, 4–4.25 mm.

Brownsville, Texas (Esperanza Ranch, and San Tomas). Two specimens in the Museum of the Brooklyn Institute.

Distinguished from any of our species by the black spots near basal angles of thorax, the divergent thoracic lines and the basal fascia extending along the sides to the middle of elytra.

Anthribus penicellatus, new species.

Cylindrical, clothed with white, ochreous and brown hairs. Thorax and elytra with tufts of erect hairs, the middle one of thorax black and long. Head and beak clothed with yellowish-white and ochreous hairs. Thorax as long as wide at base, narrower at apex, nearly parallel behind, base slightly arcuate, side margin extending to the middle, disk finely and sparsely punctured, covered with brown and ochreous hairs, three brush-like tufts at middle transversely placed, the middle one black and the largest, near the outer tufts denser white hairs forming arcuate indistinct lines, converging towards apex. Elytra parallel, declivous behind, with rows of coarse punctures, surface with white, ochreous and brown hairs, each side with three larger tufts in a row and some smaller ones at sides and apex, the median tuft yellowish white, the others brown, on each side of apex a small round black spot. Length, 3 mm.

Brownsville, Texas (Esperanza Ranch). One specimen in the Museum of the Brooklyn Institute.

Distinct from the other species by the absence of a large white spot or a fascia at base, the more declivous elytra at apex and the large prominent median tuft on thorax. The five species of *Anthribus* in our fauna may be separated by the following table:

Pubescence of thorax and elytra uniform, dense, yellowish gray, without erect tufts of scales.....*livndus*, Lec.

Pubescence grayish white, yellow and brown forming denser brush-like tufts on thorax and elytra.

Elytra with a well defined large transverse white spot in front of middle not extending to the side margins.....*cornutus*, Say.

Elytra with a more or less distinct basal fascia of dense white or ochreous hairs extending to the side margin.

Thorax without larger black spot near each hind angle, the middle and posterior tufts of hairs on the elytra more widely separated from each other than the first and second, the line of denser white and yellowish hairs convergent in front.....*vagus*, Horn.

Thorax with one black spot each side near hind angles, the distance between the first and second elytral tuft equal to that of the second and third, the lines of whitish and ochreous hairs at apex of thorax divergent in front.....*bipunctatus*, n. sp.

Elytra without basal fascia or spot, elytral tufts equidistant, middle thoracic tuft large and black, the arcuate lines convergent in front but very indistinctly defined at apex.....*panicellatus*, n. sp.